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In the claims:

1.   (Previously presented) A method for inducing an undifferentiated cell having activin receptors responsive to activin to differentiate to a neuronal cell phenotype, which undifferentiated cell is provided in a culture of two or more cells in vitro, comprising

providing said cell with a first agent that antagonizes the biological action of activin selected from follistatin, proteins that include at least one follistatin molecule, an $\alpha2$-macroglobulin, and an inhibin, and

a second agent which agent is a neurotrophic factor that enhances a particular differentiation fate of the cell,

wherein said first agent and second agent are provided in amounts sufficient to induce differentiation of said cell to a neuronal cell phenotype.

2.   (Previously presented) The method of claim 1, wherein said first agent inhibits the biological activity of activin by preventing activin from binding growth factor receptors on the surface of said cell.

3.   (Previously presented) The method of claim 2, wherein said first agent binds said growth factor and sequesters said growth factor such that it cannot bind said growth factor receptors.

4.   (Currently amended) The method of claim 3, wherein said first agent is selected from the [[a]] group consisting of a follistatin, an α2-macroglobulin, and a protein containing at least one follistatin module.

5-6.   (Canceled)

7.   (Previously presented) The method of claim 2, wherein said first agent inhibits binding of said growth factor with said growth factor receptors via its own binding to said growth factor receptor.

8.   (**Previously presented**) The method of claim 7, wherein said first agent is an inhibin.

9-14. (**Canceled**)

15.   (**Currently amended**) The method of claim 1, wherein said second agent is selected from ~~cilliary~~ ciliary neurotrophic growth factor, Schwannoma-derived growth factor, glial growth factor, striatal-derived neuronotrophic factor, platelet-derived growth factor, scatter factor, a vertebrate *hedgehog* protein, noggin, and a ligand for a *Notch* receptor.

16.   (**Canceled**)

17.   (**Previously presented**) The method of claim 1, wherein said neuronal cell phenotype comprises a neural progenitor cell.

18.   (**Currently amended**) The method of claim 17 [[1]], wherein said neuronal progenitor cell is selected from a group consisting of a melanocyte progenitor cell, a glial progenitor cell, a sensory neuron progenitor cell, a sympatho-adrenal progenitor cell, a parasympathetic progenitor cell, and an enteric progenitor cell.

19.   (**Previously presented**) The method of claim 1, wherein said neuronal cell phenotype is a terminally-differentiated neuronal cell.

20.   (**Currently amended**) The method of claim 19, wherein said terminally-differentiated neuronal cell is selected from a group consisting of a microglial cell, a macroglial cell, a ~~schwann~~ Schwann cell, a cholinergic cell, a peptidergic cell, and a serotonergic cell.

21.   (**Previously presented**) The method of claim 1, wherein said undifferentiated cell is selected from an embryonic cell, a fetal cell, and a neonatal cell.

22-44. (**Canceled**)